REMARKS

Claims 12-28 are pending in the present Application. No claims have been cancelled, amended, or added leaving claims 12-28 for consideration.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 12-28 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection.

The examiner alleges that none of the paragraphs cited explicitly discloses, "measuring the operating temperature of the fuel cell assembly." Applicants respectfully disagree.

In particular, if a structure or process is not explicitly described, it may still meet the description requirement if the concept of what is claimed is "inherent" in what is described. If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met. See, e.g., Vas-Cath Inc. v. Mahurkar, 935 F.2d at 1563, 19 USPQ2D at 1116; Martin v. Johnson, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating "the description need not be in ipsis verbis [i.e., "in the same words"] to be sufficient").

Specifically, Examples 1 and 2 inherently describe, "measuring the operating temperature of the fuel cell assembly." Firstly, the specification states that the temperature gradient is kept optimal over the entire plate resulting in optimal performance of the fuel cell. *See* specification at paragraph [0073]. Since the temperature is adjusted to obtain optimal performance of the fuel cell, the temperature of the fuel cell is necessarily adjusted during operation. The specification further states that each thermocouple measures the temperature of the fuel cell assembly at its location and adjusts according to the measured temperature in order to keep the fuel cell at the optimal temperature. *See* specification at paragraph [0072]. Since the optimal temperature of the fuel cell is maintained during operation of the fuel cell in order to achieve optimal performance, it

follows that the thermocouple is measuring "the operating temperature" of the fuel cell.

Secondly, in Example 2 the specification clearly describes, in paragraph [0074], the operation of a fuel cell and the measurement of the operation temperature. Specifically, paragraph [0074] states that hydrogen fuel and oxygen enter at a gas inlet, the product of the reaction exits at an outlet, and flow channels channel the reactant and product gases across the length of the fuel cell assembly. The specification further states that Figure 5b shows the temperature gradient associated with this reactant channel arrangement and that Figure 7 shows the thermoelectric layer used with the fuel and oxidant flow channel arrangement. In addition, a thermocouple, which measures the temperature of the fuel cell assembly at its location, is located between each pair of adjacent thermoelectric devices. The voltage of the power source, and thus the amount of heat transferred, is then adjusted according to the measured temperature in order to keep the fuel cell at the optimal temperature. Once again, since the temperature is measured and adjusted during operation, the measured temperature is necessarily the operating temperature. Thus, the specification clearly describes the configuration where the thermoelectric layers are operated during normal operation of the fuel cell stack in order to achieve optimal performance. Therefore, the step of measuring the operating temperature of the fuel cell assembly is adequately described.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 26 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

The examiner asserts it is unclear how a step of measuring the start-up temperature of the fuel cell assembly can follow a step of measuring the operating temperature of the fuel cell assembly since the start-up temperature is normally measured before the operating temperature. However, claims 12 and 26 do not recite any specific sequence for the steps of the method. Since no specific sequence is expressly claimed, the method merely comprises the disclosed steps in no particular order. Thus, the simple fact that "measuring the start-up temperature" is disclosed in a dependent claim does not necessarily indicate that this step is sequentially performed after the

steps of the independent claim.

Reconsideration and withdrawal of this rejection are respectfully requested.

It is believed that the foregoing remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejection(s) and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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